

LILAEOPSIS CAROLINENSIS (APIACEAE) A SPECIES NEW TO TEXAS AND A KEY TO LILAEOPSIS IN TEXAS

Stephan L. Hatch

S.M. Tracy Herbarium (TAES)
Department of Ecosystem Science and Management
Texas A&M University
College Station, Texas 77843-2138, U.S.A.

A. Tucker Slack

J.D. Murphree Wildlife Management Area
10 Parks and Wildlife Drive
Port Arthur, Texas 77640, U.S.A.

ABSTRACT

The occurrence of *Lilaeopsis carolinensis* J.M. Coult. & Rose is reported new to Texas and a key to the species of *Lilaeopsis* in Texas is provided.

KEY WORDS: *Lilaeopsis carolinensis*, new to Texas

RESUMEN

Se reporta la presencia de *Lilaeopsis carolinensis* J.M. Coult. & Rose, en Texas y se provee una clave para el especies *Lilaeopsis* en Texas.

Lilaeopsis carolinensis was recently collected at the Texas Parks and Wildlife Department, J.D. Murphree Wildlife Management Area, Jefferson County, Texas, in an interior ditch of compartment 2 on 15 April 2008. The species occurred in a shallow, freshwater canal associated with *Hydrocotyle* sp. and *Salvinia minima* J.G. Baker in a floating vegetation mat. The specimen was identified using Radford et al. (1968), Godfrey and Wooten (1981), and Tobe et al. (1998).

This species is native to the southeastern U.S.A. (USDA-NRCS 2008) and likely a recent introduction to Texas, not having been recorded by Correll and Johnston (1970), Correll and Correll (1975), Affolter (1985), Hatch et al. (1990), Jones et al. (1997), or The Flora of Texas Database (2008). The following herbaria (TEX/LL; SHSU; and ASTC) searched their collections for Texas specimens of this species without finding specimens.

The North American distribution of *L. carolinensis* extends from Virginia south to Florida and west to Louisiana [(Radford et al. (1968), Godfrey and Wooten (1981), and Tobe et al. (1998)]. State distributions are AL, AR, FL, GA, LA, MS, NC, SC, and VA (USDA-NRCS 2008). This is the first reported and vouchered collection of the species from Texas. This discovery in Texas is not unexpected because of its close proximity to similar Louisiana habitats from which the species is known.

Another species of *Lilaeopsis*, *L. chinensis* (L.) Kuntze, is also known from a single Texas collection (*L. Brown & Marcus* 16926) from Chambers County. This specimen was collected in 1998. The following key will serve to identify the two Texas species. Tobe et al. (1998) and Radford et al. (1968) provide illustrations of both species.

A KEY TO THE SPECIES OF LILAEOPSIS IN TEXAS

1. Peduncles shorter than leaves; pedicels 5–10 mm long; leaves (phyllodes) 10–30 cm long with 7–15 septa; habitat fresh water _____ **L. carolinensis**
2. Peduncles longer than leaves; pedicels 3–4 mm long; leaves (phyllodes) 1–5 cm long with 4–6 septa; habitat brackish water _____ **L. chinensis**

Lilaeopsis carolinensis Coult. & Rose, (**Fig. 1**). CAROLINA GLASSWORT. Rhizomatous, perennial herbs; stems adventitious, ca 50 cm long, horizontal, roots at nodes; leaves (phyllodes) 10–30 cm long, clavate to linear, with 7–15 transverse septa; peduncles much shorter than leaves; pedicels 5–10 mm long; umbels 5–15 flowered, simple; sepals absent or minute; petals 5, white; fruits 2–2.5 mm diameter, mericarps ovate, veins prominent; flowering period March to June.

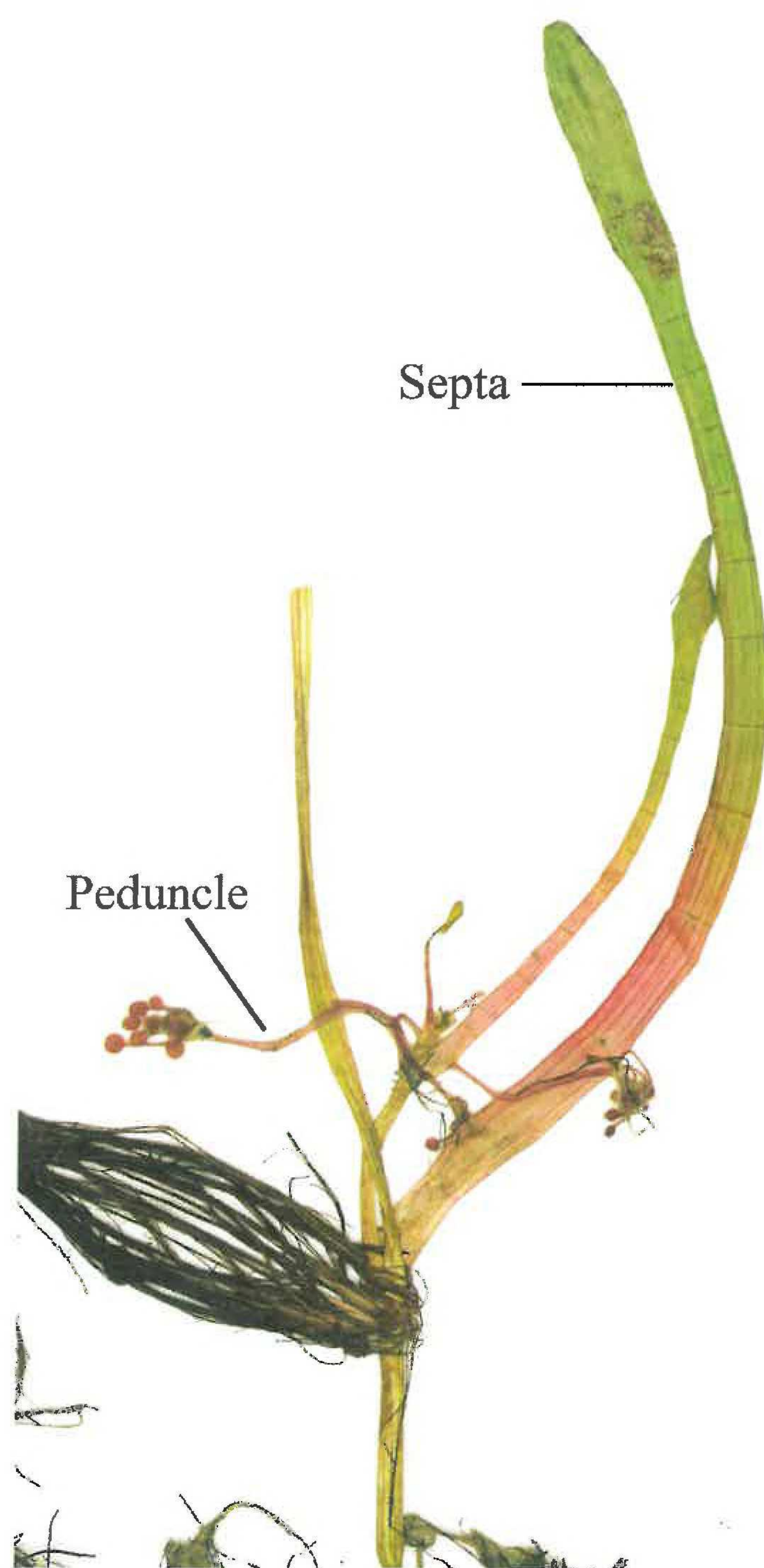


FIG. 1. Digital image of *Lilaeopsis carolinensis* showing important septa and peduncle characteristics.

Specimen examined. **TEXAS. Jefferson Co.:** Texas Parks and Wildlife Department, J.D. Murphree Wildlife Management Area in ditch within Compartment 2. Shallow, fresh water. 15 Apr 2008 Slack s.n. (TAES). Synonym *L. attenuata* auct. non (Hook. & Arn.) Fern.

***Lilaeopsis chinensis* (L.) Kuntze**, EASTERN GRASSWORT. Rhizomatous, perennial herbs; stems ca. 50 cm long, horizontal, roots at nodes; leaves (phylloides) 1–5 cm long, clavate to linear, with 4–6 transverse septa; peduncles longer than leaves; pedicels 3–4 mm long; umbels 4–10 flowered, simple; sepals absent or minute; petals 5, white; fruits 2–2.5 mm diameter, mericarps ovate, veins prominent; flowering period March to June. Tidal marshes, brackish. Synonym *L. lineata* (Michx.) Greene. See PLANTS Database (USDA-NRCS 2008) for the distribution.

ACKNOWLEDGMENTS

The authors thank the curators of the following herbaria for a search of their collections for species records in Texas; TEX/LL, ASTC, and SHSU.

REFERENCES

- AFFOLTER, J.M. 1985. A monograph of the genus *Lilaeopsis* (Umbelliferae). Syst. Bot. Monogr. 6:1–140.
- CORRELL, D.S. AND H.B. CORRELL. 1975. Aquatic and wetland plants of the southwestern United States. Environmental Protection Agency. U.S. Government Printing Office, Washington D.C.
- CORRELL, D.S. AND M.C. JOHNSTON. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner.
- FLORA OF TEXAS DATABASE. 2008. University of Texas Herbarium, Plant Resources Center, Austin. < <http://www.biosci.utexas.edu/prc/Tex.html> >
- GODFREY, R.K. AND J.W. WOOTEN. 1981. Aquatic and wetland plants of southeastern United States. Dicotyledons. University of Georgia Press, Athens.
- HATCH, S.L., K.N. GANDHI, AND L.E. BROWN. 1990. Checklist of the vascular plants of Texas. Texas Agric. Exp. Sta. Bull M.P. 1655. College Station.
- JONES, S.D., J.K. WIPFF, AND P.M. MONTGOMERY. 1997. Vascular plants of Texas. University of Texas Press, Austin.
- RADFORD, A.E., H.E. AHLES, AND C.R. BELL. 1968. Manual of the vascular flora of the Carolinas. The University of North Carolina Press, Chapel Hill.
- TOBE, J.D., K.C. BURKS, R.W. CANTRELL, M.A. GARLAND, M.E. SWEELEY, D.W. HALL P. WALLACE, G. ANGLIN, G. NELSON, J.R. COOPER, D. BICKNER, K. GILBERT, N. AYMOND, K. GREENWOOD, AND N. RAYMOND. 1998. Florida wetland plants. Florida Department of Environmental Protection, Tallahassee.
- USDA-NRCS. 2008. The PLANTS Database National Plant Data Center, Baton Rouge, Louisiana. <http://plants.usda.gov> Accessed June 2008.